



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,626	08/22/2001	John M. Baron	10010923	8671

22879 7590 06/17/2005

HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
----------

MISLEH, JUSTIN P

ART UNIT	PAPER NUMBER
----------	--------------

2612

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/934,626

Applicant(s)

BARON ET AL.

Examiner

Justin P. Misleh

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 4, 6 - 17, and 19 - 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 4, 6 - 15, 17, and 19 - 22 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Arguments*

#### **35 U.S.C. § 102 Rejection**

1. Applicant's arguments with respect to Claims 9 – 12 have been considered but are moot in view of the new grounds of rejection.

#### **35 U.S.C. § 103 Rejection**

2. Applicant's arguments filed 19 January 2005 have been fully considered but they are not persuasive.

3. Initially, Applicant argues against Lambert individually and not as part of a combination with Kawamura et al. Also, Applicant argues that Lambert does not disclose “any prohibition against overwriting any video images in the cache” and also does not “determine which cache video images are to be replaced.” Additionally, Applicant asserts that Lambert only discloses, “that if the memory is full and a new image needs to be stored, then the oldest data in the memory would be simply overwritten with the new image data.”

4. In response to Applicant's arguments against Lambert individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

5. In response to Applicant's arguments regarding the teachings of Lambert, Applicant's arguments are simply misplaced. The Examiner introduced Lambert, as analogous prior art, to

Art Unit: 2612

overcome the deficiencies of Kawamura et al. More specifically, the Examiner stated that while Kawamura et al. disclose “automatically selecting recorded images that been transferred ... and erasing those automatically selected recorded images,” Kawamura et al. does not disclose erasing said recorded images “WHEN insufficient free space exists in said memory to store newly captured images.” The Examiner introduced Lambert to teach “erasing the recorded images WHEN insufficient free space exists in said memory to store newly captured images.” (Non-Final Office Action, 16 October 2004). Applicant actually affirms the Examiner’s position by asserting Lambert only discloses, “that if the memory is full and a new image needs to be stored, then the oldest data in the memory would be simply overwritten with the new image data.” Therefore, it is irrelevant whether or not Lambert discloses, “any prohibition against overwriting any video images in the cache” and “determine[s] which cache video images are to be replaced.”

### *Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 9, 10, and 12** are rejected under 35 U.S.C. 102(e) as being anticipated by Pavley.

8. For **Claim 9**, Pavley discloses, as shown in figures 4 – 7 and as stated in column 5 (line 25) – column 6 (line 42), a memory management method for a memory (“local storage space”) of an image capturing device (“digital camera 110”), comprising the steps of:

Art Unit: 2612

transferring a copy of an image out of said memory (“local storage space”) during an image archiving operation (column 6, lines 10 – 17);

marking said image in said memory as an archived image (see column 5, lines 39 – 41);  
and

automatically replacing an archived image with a newly captured image if said memory lacks sufficient free space to store said newly captured image (see column 5, line 61 – column 6, line 9).

9. As for **Claim 10**, Pavley discloses, as stated in column 6 (lines 10 – 17), wherein the transferring step comprises transferring said copy to an external computer device (1100).

10. As for **Claim 12**, Pavley discloses, as shown in figure 5 and as stated in column 5 (lines 25 – 45), wherein the marking step comprises changing a status variable in an associated status storage cell (file attribute designations of file tags) to an archived state.

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Pavley.

13. As for **Claim 11**, while Pavley discloses wherein the transferring step comprises transferring said copy to an external computer device, Pavley does not disclose wherein the transferring step comprises transferring said copy to a removable memory medium.

**Official Notice** (See MPEP § 2144.03) is taken that both the concepts and advantages of transferring a copy of an image out of an image-capturing device to a removable memory medium are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to transfer a copy of an image out of an image-capturing device to a removable memory medium as a means to provide a backup copy of the image on a portable permanent mass storage device with device interoperable capabilities.

14. **Claims 1 – 4, 6 – 8, 13 – 15, 17, and 19 – 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al. in view of Lambert.

15. For **Claim 1**, Kawamura et al. disclose, as shown in figures 2, 4, 6, and 7 and as stated in columns 4 (lines 11 – 23 and 63 – 67), 5 (lines 1 – 16 and 31 – 56), 6 (lines 28 – 44), 7 (lines 3 – 29), 8 (lines 30 – 35 and 54 – 62), and 9 (lines 18 – 22), an image capturing device (11), comprising:

a processor (15);

at least one interface (16) communicating with said processor (15) and capable of transferring images out of said image capturing device (see column 4, lines 12 and 13);

a memory (21) communicating with said processor (15) and capable of storing a plurality of records, with a record including image data (“picture information”) and image status data (PC icon 52) indicating whether a copy of the image has been transferred out of the device (The icons are “affixed to” each item of recorded information. See column 5, lines 31 – 33; column 6, lines 51 – 57; and column 8, lines 30 – 35);

wherein said processor (15) determines whether said memory (21) includes any archived images (see step S26 in figure 7 and column 8, lines 54 – 62) as indicated by said status data (PC icon 52) and replaces one or more archived images (“recorded information is erased from the memory card 21”) in said memory with a newly captured image (“records the [picture] information in a free storage space in the memory card 21”; see column 4, lines 63 – 67).

According to Kawamura et al., once the images (“recorded information” or “picture information”) are transferred (via the interface 16) they are affixed with an icon (PC icon 52) indicating that they have been transferred. The images and associated affixed icons are stored together in the memory card (21). Furthermore, Kawamura et al. discloses a “Transfer Mode” and an “Erase Mode” wherein the images are transferred in the “Transfer Mode” and the images are erased in the “Erase Mode”. Lastly, Kawamura et al. states that the camera is provided with an automatic selecting function for automatically selecting recorded images that have been transferred (as indicated by an affixed icon) and erasing those automatically selected recorded images.

However, as stated above, the recorded images that been transferred are erased in the “Erase Mode”; therefore, as required by the claim language, Kawamura et al. does not disclose, “replacing” (“erasing”) the recorded images that have been transferred WHEN insufficient free space exists in said memory to store newly captured images.

On the other hand, Lambert also discloses an image-capturing device comprising a memory for storing archived image data. More specifically, as shown in figures 1 – 3, Lambert teaches an image-capturing device (see figure 1) with a memory (32), wherein a processor (18) replaces one or more images in said memory with a newly captured image WHEN insufficient

Art Unit: 2612

free space exists in said memory (32) to store newly captured images (see column 5, lines 19 – 26).

As stated in column 1 (lines 29 – 32 and 40 – 43) of Lambert, at the time the invention was made it would have been obvious to one with ordinary skill in the art to replace one or more archived images in the memory with a newly captured image when insufficient free space exists in said memory to store newly captured images in the image capturing device, as taught by Kawamura et al. in view of Lambert, for the advantage of providing an image capturing device that significantly reduces the amount of images to be recorded, while simultaneously ensuring that images of high interest are being stored.

16. As for **Claim 2**, Kawamura et al. disclose, as shown in figure 2 and as stated in column 6 (lines 33 – 44), wherein said at least one interface (16) is a communication interface capable of transmitting a stored image to an external device (17).

17. As for **Claim 3**, Kawamura et al. discloses, as stated in column 9 (lines 18 – 22), wherein said at least one interface (16) is a USB cable interface.

18. As for **Claim 4**, while Kawamura et al. disclose wherein said at least one interface (16) is a communication interface capable of transmitting a stored image to an external device (17), Kawamura et al. does not disclose wherein said at least one interface is a removable memory medium interface capable of transmitting a stored image to a removable memory medium.

**Official Notice** (See MPEP § 2144.03) is taken that both the concepts and advantages of transferring a copy of an image out of an image-capturing device to a removable memory medium are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to transfer a copy of an image out of an



Art Unit: 2612

image-capturing device to a removable memory medium as a means to provide a backup copy of the image on a portable permanent mass storage device with device interoperable capabilities.

19. As for **Claim 6**, in regards to the obviousness shown in Claim 1, Lambert also discloses an image-capturing device comprising a memory for storing archived image data. More specifically, as shown in figures 1 – 3, Lambert teaches an image-capturing device (see figure 1) with a memory (32), wherein a processor (18) replaces one or more images in said memory with a newly captured image WHEN insufficient free space exists in said memory (32) to store newly captured images (see column 5, lines 19 – 26). Furthermore, Lambert teaches, as stated in column 5 (lines 19 – 26), overwriting the oldest image with a new image when the memory is full.

However, Lambert does not disclose the method in determining the oldest image.

**Official Notice** (See MPEP § 2144.03) is taken that both the concepts and advantages of determining the oldest image according to stored date/time information associated with each image are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to determine the oldest image according to stored date/time information associated with each image as means to provide insight into the possible significance of each image.

20. As for **Claim 7**, while Kawamura et al. disclose, as shown in figure 2 and as stated in column 4 (lines 20 – 23), wherein said memory (21) comprises a removable memory card, Kawamura et al. do not disclose wherein said memory comprises an internal memory.

**Official Notice** (See MPEP § 2144.03) is taken that both the concepts and advantages of providing an internal memory are well known and expected in the art. At the time the invention

Art Unit: 2612

was made, it would have been obvious to one with ordinary skill in the art to provide an internal memory as a means to significantly reduce the likelihood of physical damage to the memory or its contents.

21. As for **Claim 8**, Kawamura et al. disclose, as shown in figure 2 and as stated in column 4 (lines 20 – 23), wherein said memory (21) comprises a removable memory card.

22. For **Claim 13**, Kawamura et al. disclose, as shown in figures 2, 4, 6, and 7 and as stated in columns 4 (lines 11 – 23 and 63 – 67), 5 (lines 1 – 16 and 31 – 56), 6 (lines 28 – 44), 7 (lines 3 – 29), 8 (lines 30 – 35 and 54 – 62), and 9 (lines 18 – 22), a memory management method for a memory (21) of an image capturing device (11), comprising the steps of:

determining whether said memory is capable of storing an additional image (“free storage space”; see column 4, lines 63 – 67);

storing a captured image in said memory if sufficient free space exists in said memory (“free storage space”; see column 4, lines 63 – 67);

determining if said memory contains at least one archived image (In the “Erase Mode”, the camera automatically selects recorded images that have been transferred, as indicated by an affixed icon, and erases those automatically selected recorded images; thus, it is determined that the memory contains at least one archived image), and

replacing said at least one archived images with said captured image if said memory contains said at least one archived image (The camera “records the [picture] information in a free storage space in the memory card 21”; see column 4, lines 63 – 67. Also see step S26 in figure 7 and column 8, lines 54 – 62).

According to Kawamura et al., once the images (“recorded information” or “picture information”) are transferred out of the camera (via the interface 16) they are affixed with an icon (PC icon 52) indicating that they have been transferred, or archived. The images and associated affixed icons are stored together in the memory card (21). Furthermore, Kawamura et al. discloses a “Transfer Mode” and an “Erase Mode”, wherein the images are transferred in the “Transfer Mode” and the images are erased in the “Erase Mode”. Lastly, Kawamura et al. states that the camera is provided with an automatic selecting function for automatically selecting recorded images that have been transferred (as indicated by an affixed icon) and erasing those automatically selected recorded images.

However, as stated above, the recorded images that been transferred (archived images) are erased in the “Erase Mode”; therefore, as required by the claim language, Kawamura et al. does not disclose, replacing (or “erasing”) one or more archived images with said captured image IF said memory is not capable of storing said captured image.

On the other hand, Lambert also discloses an image-capturing device comprising a memory for storing archived image data. More specifically, as shown in figures 1 – 3, Lambert teaches an image-capturing device (see figure 1) with a memory (32), wherein a processor (18) replaces one or more images in said memory with a newly captured image IF said memory is not capable of storing said captured image (see column 5, lines 19 – 26).

As stated in column 1 (lines 29 – 32 and 40 – 43), at the time the invention was made, one with ordinary skill in the art would have been motivated to replace one or more archived images in the memory with a newly captured image IF said memory is not capable of storing said captured image, as taught by Lambert, in the image capturing device, disclosed by

Art Unit: 2612

Kawamura et al., as a means to provide an image capturing device that significantly reduces the amount of images to be recorded, while simultaneously ensuring that images of high interest are being stored. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have replaced one or more archived images in the memory with a newly captured image IF said memory is not capable of storing said captured image, as taught by Lambert, in the image capturing device, disclosed by Kawamura et al.

23. As for **Claim 14**, Kawamura et al. disclose, as stated in columns 4 (lines 56 – 67) and 5 (lines 1 – 16), wherein the method is performed upon a press of a shutter button (31) of said image capture device.

24. As for **Claim 15**, Kawamura et al. disclose, as stated in column 4 (lines 63 – 67), “free storage space” is not determined until after an image has been captured (see column 4, lines 57 – 63). Therefore, Kawamura et al. disclose wherein the method is performed upon completion of an image capture.

25. As for **Claim 17**, Kawamura et al. disclose, as stated in column 8 (lines 54 – 62), that the camera is provided with an automatic selecting function for automatically selecting recorded images that have been transferred (as indicated by an affixed icon) and erasing those automatically selected recorded images. Therefore, Kawamura et al. determines if said memory contains archived images by inspecting whether an icon affixed to the image.

26. As for **Claims 19 and 22**, while Kawamura et al. disclose wherein the transferring step comprises transferring said copy to an external computer device, Kawamura et al. does not disclose wherein the transferring step comprises transferring said copy to a removable memory medium.

**Official Notice** (See MPEP § 2144.03) is taken that both the concepts and advantages of transferring a copy of an image out of an image-capturing device to a removable memory medium are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to transfer a copy of an image out of an image-capturing device to a removable memory medium as a means to provide a backup copy of the image on a portable permanent mass storage device with device interoperable capabilities.

27. As for **Claim 20**, according to Kawamura et al., a replaced archived image is a newly captured image recorded in a “free storage space in the memory card”. Furthermore, Kawamura et al. teach that a status icon (52) is only affixed to an image when the image has been transferred out of the device. Therefore, a replaced archived image is by default in non-archived status and the “changing” corresponds to the “erasing” of the archived image.

28. As for **Claim 21**, Kawamura et al. disclose, as stated in column 9 (lines 50 – 60), wherein an archived image comprises a captured image that has been transferred out of the image capturing device and wherein the archived image may be transferred out of the image capturing device a plurality of times.

In other words, Kawamura et al. disclose wherein the transferring step comprises transferring said copy to an external computer device.

#### *Allowable Subject Matter*

29. **Claim 16** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2612

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or fairly suggest wherein an image capture is disabled if said memory full and if said memory does not contain at least one archived image.

*Cited Prior Art*

30. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. The newly cited prior art teach of various methods and system for archiving recently captured digital images.

*Conclusion*

31. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

32. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The


Art Unit: 2612

Examiner can normally be reached on Monday through Thursday from 7:30 AM to 5:00 PM and on alternating Fridays from 8:00 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy R Garber can be reached on 571.272.7308. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM  
June 3, 2005



AUNG MOE  
PRIMARY EXAMINER